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Friday Notes is designed to enhance communication among various agricultural sectors, educators, students, and the public who are interested in a variety of plant, animal, food, and environmental issues. *Friday Notes* advocates the pursuit of credible, unbiased, science-based information. Material contained in linked articles is from the original authors and does not necessarily reflect the views of the CAST organization.

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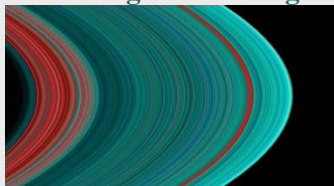
[Food Science and Safety News](#)

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Reaching for the Rings



An unmanned NASA spacecraft, Cassini, has [plunged into the gap between Saturn and its rings](#)--a pioneering journey that could offer an unprecedented view of the sixth planet from the Sun.

Facing Threats

Sonny Ramaswamy--director of the USDA National Institute of Food and Agriculture--said scientists in agriculture, nutrition, and related fields must [pursue solutions to problems such as hunger, obesity](#), and constraints on the availability of nutritious foods.

Cal Poly Solar Farm

California Polytechnic State University will break ground this summer on a [solar farm that will generate renewable energy](#), create *Learn by Doing* opportunities for students, and save the university millions of dollars.

April 28, 2017

Jayson Lusk--2017 Borlaug CAST Communication Award Honoree

The Council for Agricultural Science and Technology announced that the 2017 Borlaug CAST Communication Award goes to Jayson Lusk, a consummate communicator who promotes agricultural science and technology in the public arena.

Lusk uses multiple forms of media to advocate for science as he explains how innovation and growth in agriculture are critical for food security and global progress. Scroll down to page two for more about Lusk and the April 27 presentation event that featured a speech by Kevin Folta, last year's recipient.



Jayson Lusk: prolific writer, influential speaker, and dedicated proponent of agricultural science.

News and Views

****Perdue Confirmed as Ag Head:** The [Senate confirmed former Georgia Governor Sonny Perdue](#) as secretary of agriculture. Perdue will encounter many issues such as the new farm bill, low commodity prices, immigration reform, and trade agreements.

****Perdue's First Task:** Secretary Perdue will [lead a new interagency task force on agriculture and rural prosperity](#)--examining how the federal government can lighten regulatory burdens on agricultural producers, expand trade markets for U.S. products, and accelerate investment in rural America.

****Executive Orders Include Agriculture:** President Trump [signed more than 30 executive orders](#) during his first 100 days, including one titled *Promoting Agriculture and Rural Prosperity in America*.

****Trade Tussles:** The United States is placing new [tariffs on the import of Canadian softwood lumber](#). This comes during a sensitive time in

National Champs

The Texas A&M University Stock Horse Team was [named national champion](#) at the 2017 National Collegiate Stock Horse Championships.

Meat Evaluation Winners

The Kansas State University [Meat Animal Evaluation Team](#) won National Champion honors in the 2017 Collegiate Meat Animal Evaluation Contest.

UK Wheat Field Day

The University of Kentucky [Wheat Science Group will host its annual field day](#) on May 9 at its Research and Education Center farm.



CAST Social Media

Click here for [links to CAST sites](#): Twitter, Facebook, Pinterest, LinkedIn, videos, and blogs.

U.S.-Canada trade relations, with North American Free Trade Agreement talks on the horizon.

News from the Far Side of the Barn

A Really Cool Creature (part one): We've always been fans of the naked mole rat, the so-called "ugliest animal in the world." As this short video explains, the [amazing creature can go without oxygen](#) for long periods--and this might have medical implications for humans.



And this is considered a cute naked mole rat!

Fake, Real, and Interesting (video): Animal sounds in nature documentaries are usually not real, but the [manipulation of filmmaking goes further](#)--and maybe that's good, according to this article.

A Super Creature in Many Ways (part two): As this long video shows, naked mole rats are social mammals living in insect-like colonies with a queen mole rat--one reportedly gave birth to 900 pups in her lifetime. [They work as a group, defend, burrow, and gather food.](#) They are also cold blooded and have relatively long life spans. Research indicates they don't feel pain and are able to resist cancer.

2017 BCCA Winner Jayson Lusk

"an unparalleled communicator"

Jayson Lusk calls himself a "food and agricultural economist who studies what we eat and why we eat it." But as one colleague stated, "He's more than a scholar; he's an unparalleled communicator." Lusk uses articles, editorials, and a popular blog to take complicated issues and make them accessible to all. He has published influential books and more than 190 articles in peer-reviewed scientific journals on topics ranging from animal welfare to consumer interests. He also communicates through frequent television appearances, numerous radio and podcast interviews, and many well-received presentations. Various media outlets name him as one of the most prolific and cited food and agricultural economists of the past decade.

Lusk is currently a Regents Professor and Willard Sparks Endowed Chair with the Department of Agricultural Economics at Oklahoma State University. In July he will become the head of the Department of Agricultural Economics at Purdue University.

[Click here to read the entire press release](#) about Jayson Lusk--including information about his previous work, references to his most recent book, and excerpts from the praise he received from colleagues.



Jayson Lusk delivering a TED Talk.

An award presentation will occur at a breakfast side event cohosted by Syngenta and CAST at the World Food Prize Symposium on October 18, 2017, in Des Moines, Iowa. The Borlaug CAST Communication Award honors the legacies of Nobel Prize winner Dr. Norman Borlaug and Dr. Charles A. Black, the first

president of CAST.

BCCA Winner Announced at World Bank Event

Last year's winner, Kevin Folta, delivered address



The April 27 event to announce the 2017 BCCA winner was held at the World Bank in Washington, D.C. Harideep Singh of the World Bank and CAST's Kent Schescke welcomed the gathering before the 2016 BCCA recipient, Kevin Folta, delivered his address--*Earn Trust Before Facts Can Flow*. CAST President Richard Cavaletto, of Cal Poly State University, then announced the 2017 award. Sarah Hull of Syngenta delivered the concluding remarks.

Friday Notes News Categories

Photos courtesy of the Agricultural Research Service (top masthead); TopLatest News (globe at right). P. 1 Saturn pic from Reuters and aljazeera.com, and mole rat pic from news.bbc.com. Animal Sec. cow pic from twitter.jpg. Food Sec. avocado cartoon from ondietandhealth.com. Plant Sec. plant pic from dfw.cbslocal.com. Inter. Sec. fish pic from acsh.org. Gen. Sec. caterpillar drawing from ayeartothinkitover.com. Unless otherwise noted, photos courtesy of the USDA Agricultural Research Service.



Animal Agriculture and Environmental News

Down on the Dairy Farm (video): The U.S. Farmers & Ranchers Alliance helps [dairy farmers share stories](#) of what it is like to run a farm or ranch in the United States today.

Life Developing in a "Large Ziplock Bag with Tubes" (video): An [artificial womb successfully grew baby sheep](#), and scientists are wondering about the implications for humans.

Cow Concerts--Live Jazz for Bovine Appreciation (video): Ed Henderson is a fifth-generation [dairy farmer who takes outdoor concerts to the next level](#).

Working the Meat Line (video): Pushed by worker advocates and growing consumer awareness, Tyson Foods promised [better conditions for workers](#) at its meat processing plants.

Dealing with Bird Flu: With a highly contagious bird flu virus in China and another less toxic strain in the United States, many Midwest farmers say they have a [better idea of how to keep the virus at bay](#) two years after a devastating outbreak in their region.



Jazz for bovine appreciation has been upgraded, according to a story link at left.

Pushing Pork: The USDA says meat production during 2016 was at an all-time high, including a [new record for pork](#) at 24.957 billion pounds.

Grazing and the Environment: The [ecological consequences of poor grazing management](#) in the desert ecosystems of the American West can be severe, as this University of Nevada-Reno article explains.

Egg Safety: These ARS government scientists developed a [technology that rapidly pasteurizes eggs](#) and could sharply reduce the number of illnesses caused each year by egg-borne Salmonella bacteria.

Antibiotic Replacement? A few companies, including a spinoff from North Carolina State University, are pursuing [CRISPR-based antibiotics](#) commercially. This "probiotic" has not yet been tested on animals.

Home on the Range? (opinion): Some conservationists fear that a wall the length of the Mexican border with the United States will harm the [survival chances of some animal species](#).



Food Science and Safety News

Fat Chance (video): These researchers [claim saturated fat is not a heart problem](#), but others disagree.

Food Allergies and Children: According to this government report, [food allergies among children increased substantially](#) between 1997 and 2011--research gaps and misinformation complicate a situation that could be life threatening.

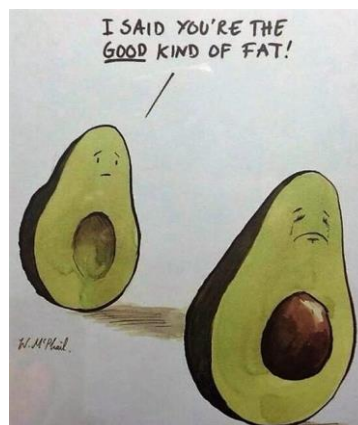
Sweet but Harmful? (opinion--see below): According to this study, [sugar and artificially sweetened beverages](#) are linked to risk factors that could promote diseases and dementia.

Sour about the Sweets Study (opinion--see above): This commentary contends that the new study about sugar risks [says nothing certain about a causal connection](#) between diet drinks and cardiovascular ailments.

Garbage Food: In the past three years, there's been an explosion in the number of [start-ups making products from food waste](#)--flour milled from discarded coffee fruit to vodka from strawberries.

Milk That Lasts "Forever": Ultra-heat-treated milk is a shelf staple, especially in tropical zones where milk easily spoils. This BBC [article investigates its special properties](#).

Blood Pressure and Potassium: A research team from the University of Southern California has found that [high blood pressure may be linked to low potassium intake](#).



Plant Agriculture and Environmental News

Plants, Water, and Conservation (video): Plants are 90% water and depend on it to grow. See how plant science [innovations are helping farmers conserve](#) this precious natural resource.

Book--*The Ground Beneath Us*: According to this author, we need to protect the world's soil before it's too late--[book excerpt included in this article](#).

An App for Soil Info: This smartphone app is available as a free download for both iPhone and Android users to [access soil survey information](#)--it is a portable version of a UC-Davis innovation.

Diverse Crop Mix for Award-winning Farmers: These farmer brothers earned honors as [finalists for the 2017 Top Producer of the Year Award](#)--they grow corn, soybeans, peppermint, carrots, potatoes, and onions.

Pest Control: Arkansas row crop production has shifted from cotton and toward soybeans, and this University of Arkansas article examines how [researchers are working to contain a persistent pest](#)--the plant pathogenic nematode.

Growing Organically: The USDA announced new data indicating that the [organic industry continues to expand](#) domestically and globally.

Gassy Trees: This university study shows that [tree trunks in upland forests actually emit methane](#) rather than store it, representing an additional source of this greenhouse gas.

Lifesaving Plants: These 15 edible [plants could save your life](#) in a dangerous situation.



Checking my soil--and it appears to be healthier than I am.



International News

Cyanide as a Fishing Tool? Cyanide fishing is [one of the causes of coral bleaching](#)--the fish at least have a fighting chance, but the reefs do not.

Hold the Sushi; Pass the Pork? Japan's [meat consumption broke new records](#) in the 2016 fiscal year according to recent data, with projected year-on-year growth set to be the fastest in five years.

Timing Is Important: A study conducted at the University of Bristol identifies how [animals measure annual time to control seasonal fertility](#).

Food Insecurity in Africa: This study seeks to understand the [dynamics of household food and nutrition insecurity](#) in urban and rural settings in Africa.

Scandal Update: Federal police in Brazil indicted 63 people for [their role in a corruption scheme](#) within the Ministry of Agriculture. The charges allege federal auditors at meat processing facilities took bribes.

Plant Influences Attitude toward the Environment: Long before it became a "superfood" in the United States, schisandra was made into soups and jams and [prized as a medicinal plant in this part of China](#).

Food Safety Synchronicity: The USDA signed an arrangement with the Australian Department of Agriculture and Water Resources that recognizes their [food safety systems as comparable to each other](#).



Cyanide fishing hurts more than just the fish.



General Interest News

Diabetes Monitor? (video): A soft contact lens prototype from Google houses a [sensor to measure glucose levels in tears](#). A pinhole in the lens lets tear fluid seep over the glucose monitor to get regular readings.

Visiting Farms in Every U.S. State: As she nears the end of her year-long journey, Natalina Sents took a break from her hectic travels and visited the *Successful Farming* studios to [chat about her experiences so far](#).

The Very Hungry Plastic-eating Caterpillar: Could waxworms--or something inside them--[help degrade the planet's mountains of plastic waste](#)?

Cancer Research Breakthrough? New findings from researchers at the University of Iowa identified two antibodies that "[blocked tumor creation](#)" in melanoma and breast cancer. The research is in its early stages.

Opportunity from a Crisis: The end of gill-net fishing brought crisis but simultaneously spawned opportunity. With help from University of Florida experts, these [fishermen retooled into successful clam farmers](#).



Lately, I've had an insatiable craving
for plastic plants.

Wind Power--Praise and Condemnation: Many like the benefits from wind energy--jobs, property tax revenues, clean power--but some critics call the [turbines noisy, over-subsidized eyesores](#).

Setting Out the Welcome Mat for Bees: The following 10 genera of [native bees are common in gardens](#) and wherever an abundance of flowering plants occur.

CAST Information

Check out CAST's page at the [YouTube site](#) to view highly regarded ag-science videos about probiotics, food safety, and water issues--or the latest video dealing with proposed mandatory labeling of GMO food items.



If you have a good idea for a CAST publication, contact us by [clicking HERE for the "Proposal Format](#) and Background Information Form."



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- * American Society of Animal Science
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- * Society for In Vitro Biology
- * Soil Science Society of America
- * Syngenta Crop Protection
- * The Fertilizer Institute
- * Tyson Foods
- * United Soybean Board
- * Weed Science Society of America
- * Western Society of Weed Science

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